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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HILTON, ALBERT

ART UNIT

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1792

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/580,109	Applicant(s) KIENER ET AL.	
	Examiner Albert Hilton	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,6 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-5, 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a second action on the merits. Claims 1, 4-5, and 7-16 are pending.

Claims 2-3, 6, and 17 have been cancelled by the applicant.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. The rejection of claim 6 under U.S.C. 112, second paragraph is rendered moot by the cancellation of claim 6.

3. The rejection of claim 12 under U.S.C. 112, second paragraph is lifted in view of the amendments to claim 12.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 4, 7, 10-12, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schollokopf (US Patent No. 4245583) in view of Higginson (US Patent No. 3132048).

4. Regarding claim 1, Schollokopf describes a dosing device (**doctor blade 5**) arranged on an application roller (**roller 2**) with a sump (**medium 1**) provided between the dosing device (**5**) and application roller (**2**), and a dosing gap (**adjustable opening 12**) is provided between the dosing device (**5**) and the application roller (**2**) through which material (**1**) is supplied to the application roller (**2**) to apply the material (**1**) from the application roller (**2**) to one side of a substrate web (**conveyor 3**) (Schollokopf: column 2, lines 20-27, 42-44, and Fig. 1). The dosing device (**5**) of Schollokopf comprises only a first area, and does not comprise rotatably selectable areas having different dosing gaps. However, Higginson teaches the use of a rotatable doctor blade (**adjustable doctor C**) that forms a gap between the dosing device (**C**) and the application roller (**cylinder B**) and which comprises several areas (**ribs c**) that differ from one another and can be rotatably selected (Higginson: column 1, lines 61-66, column 2, lines 1-8, and Figs. 1-2). Higginson teaches that the use of such a rotatable dosing device (**C**) allows for control over the thickness of material delivered to the substrate (Higginson: column 1, lines 10-21). One of ordinary skill in the art at the time of the invention, motivated by a need to control the thickness of material passing through the dosing gap in the apparatus of Schollokopf, would therefore have found it *prima facie* obvious to replace the dosing device of Schollokopf with the rotatably adjustable dosing device of Higginson.

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5. Regarding claim 4, the dosing device (**adjustable doctor C**) of Higginson comprises multiple areas (**ribs c**) provided as external surface areas (Higginson: column 1, lines 64-66, and Figs. 1-2).
6. Regarding claims 7 and 16, Higginson describes a mechanical control device (**indexing means, crank c2, holes c4**) which selects areas of the dosing device (**adjustable doctor C**) and controls the angle of the doctor blades (**ribs c**) (Higginson: column 1, lines 61-70).
7. Regarding claim 10, the external surface (**ribs c**) of the dosing device (**adjustable doctor C**) of Higginson is part of a roller wall section (**C**) (Higginson: Column 1, lines 61-66 and Fig. 2).
8. Regarding claim 11, the doctor blade of Higginson (**adjustable doctor C**) is adjustable through the use of a plurality of holes (**holes c4**) in order to set a dosing gap width (Higginson: column 1, lines 61-70 and Fig. 1).
9. Regarding claim 12, the doctor blade of Higginson (**adjustable doctor C**) is capable of being rotated such that the blades (**ribs c**) are directed at an angle greater or smaller than 90 with respect to the application roller (**roller B**) (Higginson: column 1, lines 66-70 and Fig. 2).
10. Regarding claim 14, the different areas (**ribs c**) of the dosing device (**adjustable doctor C**) of Higginson are even distributed over the circumference of the device (**C**) (Higginson: Fig. 2).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schollokopf in view of Higginson as applied to claims 1, 4, 7, 10-12, 14, and 16 above, and further in view of Klenk (US Patent No. 2995180).

11. Regarding claim 5, the application roller (**roller 2, 15**) of Schollokopf is optionally smooth or structured (Schollokopf: column 1, lines 20-30 and Figs. 1-2). The doctor blade (**ribs c**) and external surfaces areas (**c**) of Higginson are smooth (Higginson: Fig. 1). However, it is known in the art, as taught by Klenk, that a structured doctor blade (**doctor blade 4**) can be used to produce a pearled or creped substrate (Klenk: column 2, lines 27-36 and Figs. 2-4). One of ordinary skill in the art at the time of the invention, motivated by a need to produce pearled or creped paper, would therefore have found it *prima facie* obvious to make use of the structured doctor blade of Klenk in the apparatus of Schollokopf in view of Higginson).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schollokopf in view of Higginson as applied to claims 1, 4, 7, 10-12, 14, and 16 above, and further in view of Remer (US Patent No. 3565039).

12. Regarding claim 8, Schollokopf in view of Higginson but do not teach a temperature-regulating facility arranged inside or outside the roller-shaped body of the dosing device. However, Remer discloses a web substrate coating facility (unit 20 and shell 22) arranged outside a system of rollers (26, 27, 24) that comprises a temperature-regulation coil (coil 32) (Remer: column 3, lines 36-70 and Fig. 1). Remer further teaches that temperature regulation of the region around the coating apparatus can facilitate various coating operations by, for example, evaporating a solvent vehicle

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which is absorbed by the web (Remer: column 3, lines 69-75 to column 4, lines 1-7). 30.

One of ordinary skill in the art, motivated by a need to deliver a dosed coating comprising a solvent vehicle to a web substrate would have found it obvious at the time of the invention to place the dosing device of Schollokopf in view of Higginson into the temperature-regulated facility of Remer, with the reasonable expectation that such a modification would allow for the rapid evaporation of the solvent.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schollokopf in view of Higginson as applied to claims 1, 4, 7, 10-12, 14, and 16 above, and further in view of Feiertag (US Patent No. 3664561).

13. Regarding claim 9, Schollokopf in view of Higginson does not explicitly teach the use of guide rollers upstream of the application roller. However, it was well-known in the art at the time of the invention, as exemplified by Feiertag, to use adjustable guide rollers upstream of a processing station to ensure that the substrate is properly aligned (Feiertag: column 1, lines 39-64). One of ordinary skill in the art at the time of the invention, needing to properly align the substrate prior to coating in the apparatus of Schollokopf in view of Higginson, would therefore have found it *prima facie* obvious to add guide rollers to the apparatus as is taught in Feiertag.

Claims 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schollokopf in view of Higginson as applied to claims 1, 4, 7, 10-12, 14, and 16 above, and further in view of Nordby (US Patent No. 6637330).

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14. Regarding claims 13 and 15, Schollokopf in view of Higginson teach the use of doctor blades (**ribs c**) (Higgins: column 1, lines 64-66 and Fig. 2), but do not teach the use of rapidly detachable doctor blades.

15. However, the use of such clamps to hold doctor blades is known in the art, as exemplified by Nordby. Nordby discloses a dosing device with doctor blades (4) that can be detached by turning a lever (handle 35) that actuates an eccentric clamp (clamping rail 5, beam 3) (Nordby: column 10, lines 13-28, Fig. 13a-d). NORDBY further teaches that said doctor blades wear down rapidly (Nordby: column 1, lines 41-55).

16. One of ordinary skill in the art, motivated by a need to maintain a sharp working surface on the doctor blades, would have found it obvious at the time of the invention to use lever-actuated eccentric clamps to affix doctor blades to the scrapers (5) of Schollokopf in view of Higginson, with the expected result that such a modification would allow for worn working surfaces to be replaced quickly.

Response to Arguments

17. Applicant has amended claim 1 to require that the sump is disposed between the dosing device and the application roller. Additionally, amended claim 1 now requires that the dosing device allow for rotational selection of a doctor blade surface. These claim limitations are met by the combined references Schollokopf and Higginson as detailed above.

Applicant argues that the references Remer and Nordby do not teach an adhesive sump or a rotatable dosing gap. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references

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individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The sump limitation is disclosed in Schollokopf (column 2, lines 20-22 and Fig. 1) and the rotatable dosing gap is taught by Higginson (column 1, lines 61-70 and Fig. 2).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Albert Hilton whose telephone number is (571)-270-5519. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571)-272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Albert Hilton/
Examiner, Art Unit 1792

/Parviz Hassanzadeh/
Supervisory Patent Examiner, Art Unit 1792